

REMARKS

This communication is a full and timely response to the Office Action dated November 12, 2010. Claims 1-10 remain pending. By this communication claims 1 and 8 are amended for clarity. Reconsideration and allowance of all claims is requested based on the discussion that follows.

On January 25, 2011, the Examiner and Applicants' representative conducted an interview to discuss the merits of the current claim rejections. During the interview, Applicants' representative explained the focus of the claimed invention and the Examiner described how the claims were interpreted in light of the applied art. No agreement was reached.

In numbered paragraph 10 on page 5 of the Office Action, claims 1-10 stand provisionally rejected on the ground of nonstatutory obviousness-type double patenting for allegedly being unpatentable over claims 1-5 of copending Application No. 10/593,094. And in numbered paragraph 11 on page 6 of the Office Action, claims 1-10 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting for allegedly being unpatentable over claims 1-5 of copending Application No. 10/592,865. Applicants respectfully traverse these rejections. However, because both the scope of claims with respect to both the instant application and the '094 and '865 applications are not settled, Applicants request that these rejections be held in abeyance until the subject claims of any of the aforementioned applications are allowed. On these grounds, withdrawal of both rejections for nonstatutory obviousness-type double patenting is respectfully requested.

Applicants claims were variously rejected under 35 U.S.C. §103. Namely, in numbered paragraph 14 on page 4 of the Office Action, claims 1 and 3-9 are rejected under 35 U.S.C. §103(a) for alleged unpatentability over *Tindal et al* (U.S. Patent Publication No. 2002/0069274) in view of *Stallings* ("SNMP and SNMPv2: The Infrastructure for Network Management.") and *Shorter et al.* (U.S. Patent Publication No. 2003/0004822); in numbered paragraph 14 on page 10 of the Office Action, claims 2 and 10 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over *Tindal et al* in view of *Stallings* and further in view of Menezes et al ("Hash functions and data integrity" Handbook of applied cryptography); and in numbered paragraph 15 on page 12 of the Office Action, claims 11 and 12 stand rejected under 35 U.S.C. §103(a) as unpatentable over *Tindal* in view of *Stallings* and *Shorter*, and further in view of *Vetter*. Applicants respectfully traverse these rejections.

As provided in Applicants' disclosure, a reference container is established that is associated with a particular entity used in the network. Each IT system in the network can use a type of the entity stored in the reference container. Thus, the reference container also stores a list of relevant attributes for each entity type stored in the system. Furthermore, the reference container can store a reference hash value for each entity type in the reference container, where the reference hash value is a combined value of the attributes of the particular entity type.

When the consistency of an entity of a selected IT system is checked for consistency, a consistency service reads the attributes of the entity of the selected IT system. In order to enable a consistency service to access the actual attribute values of an entity, reference or meta-information about the entity is stored in a

storage device. This information comprises, e.g., a local identifier in order to access the entity in the application, and an application identifier which allows the consistency service to direct any requests related to that entity to an adapter of the IT system of the application. The adaptor is used to acquire and translate the requested information from the application via a polling mechanism and without a need for modifying the application. The reference information is the single source that has to be updated in case the utility adds new IT systems or applications.

A hash code of the read attributes is computed and compared against the reference values of a corresponding entity type stored in the reference container. If the values match, consistency of the selected IT system is verified. If the values do not match, however, a failure signal is generated.

Independent claims 1 and 8 broadly encompass the foregoing features. Independent claims 1 and 8 are directed to a method of validating a consistency of attributes of entities. The method is implemented in a system having a multitude of different IT systems and the attributes associated with the entities are stored in respective data sets of the multitude of different IT systems. These features, however, are not disclosed or suggested by the embodiments of *Tindal*, *Stallings*, and *Shorter* as combined.

In the response dated June 21, 2010, Applicants argued that a *prima facie* case of obviousness had not been established with respect to claim 1 at least because *Tindal* fails to disclose or suggest associating network device configuration records and network devices with a multitude of IT systems.

In numbered paragraph 8 of the Office Action, the Examiner maintains the claim rejection based on the combination of *Tindal*, *Stallings*, and *Shorter*, and

responds to Applicants' previous argument. Namely, the Examiner responds to Applicants' previous arguments by asserting that the network devices 135 of *Tindal* correspond to Applicants' claimed multitude of different network systems. *Tindal* discloses that a configuration reader 195 in a Network Manager Unit 140 can retrieve the intended configuration of a network device 135 from configuration storage 187 and pass the configuration to a comparator 190. The comparator 190 compares the actual configuration of the network device 135 to the desired configuration and provides the differences to an administrator 110. See *Tindal*, pgphs 42-44; Figs. 2-4. Applicants disagree with the Examiner's assessment.

Tindal discloses a system in which a configuration reader 145 retrieves the configuration of a target device, such as a router, and passes this information to a configuration comparator 190 (pgph 42). The configuration reader 145 can also acquire the intended configuration from configuration storage 187 and pass this information onto the configuration comparator 190. The comparator 190 then compares the actual configuration with the intended configuration and presents the differences to an administrator 110.

The system of *Tindal* is fundamentally different from the embodiments recited in Applicants' claims 1 and 8.

Despite the Examiner's position, Applicants' still do not believe that *Tindal* discloses the use of an IT system as recited in Applicant's claims. As provided in Applicants' claims an IT system can include any combination of a supervisory control and data acquisition system, a computerized maintenance management system, and a geographic information system. These systems provide a capability for online and real-time management and optimization of distribution and transmission systems

(Applicants' disclosure, pgphs 2-3). As a result, the IT system includes numerous entities or a compilation of assets, where each entity of a particular IT system has an associated configuration stored in the reference container.

In contrast, the Examiner alleges that each network device (i.e., router or optical device) corresponds to one of Applicants' claimed different IT systems. The Examiner fails to appreciate, however, that each network device only is a single entity and only has one associated configuration that is stored in configuration storage 187. *Tindal* does not disclose an embodiment in which a single device on the network encompasses multiple entities, where each entity has a stored configuration. As a result, *Tindal* does cannot reasonably be deemed to disclose or suggest, "entities are stored in respective data sets of a multitude of different IT systems of the utility".

Applicants are fully aware that during examination claims must be given their broadest reasonable interpretation. This "interpretation", however, must be consistent with Applicants' Specification. *Phillips v. AWH Corp.*, 415 F.3d 1403 75 USPQ2d 1321 (Fed. Cir. 2005). In *Phillips*, the Court found that when employing the "broadest reasonable interpretation" standard, **the PTO determines the scope of claims in patent applications not solely on the basis of the claim language, but upon giving claims their broadest reasonable construction "in light of the specification as it would be interpreted of one of ordinary skill in the art."** *In Re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 [70 USPQ2d 1827] (Fed. Cir. 2004). Indeed, the rules of the PTO require that application claims must "conform to the invention as set forth in the remainder of the specification and the terms and phrases used in the claims must find clear support for antecedent basis in a

description so that the meaning of the terms in the claims may be ascertainable by reference to the description." 37 CFR 1.75 (d)(1), 415 F.3d at 1316, 75 USPQ2d at 1329.

In this instance, the Examiner alleges that Applicants' claimed multitude of IT systems reads on a network device as disclosed in *Tindal*. This interpretation, however, is inconsistent with Applicants' disclosure, which gives clear and concise guidance as to the meaning of an IT system. For example, on page 2 lines 1-7 of the specification, IT systems are described as managing different facets of utility operations by carrying an electrical view on assets in order to open/close breakers or provide maintenance management for physical assets of a utility operation. In contrast, a router is a device that forwards packets across computer networks and an optical device can be a device that processes data using laser light or electromagnetic energy. While the Examiner's interpretation can arguably be regarded as a broad construction, Applicants submit that rather than unduly broadening Applicants' claimed IT system, the Examiner's assertion that this feature reads on the network devices of *Tindal* unduly narrows the claimed element in a manner that is inconsistent with Applicants' disclosure.

Stallings is applied in an effort to remedy the deficiencies of *Tindal* with regard to the use of an adapter of each IT system allows communication between the consistency service and the IT systems as recited in Applicants' claims.

Stallings discusses an SNMP technique for managing IP-based networks by defining a protocol for exchanging information between one or more management systems and a number of agents provide a framework for formatting and storing information, and defining a number of general-purpose management information

variables. See Stallings, pg. 1, col. 1. *Stallings* discloses that a management station includes an interface and applications that enable the monitoring and control of the network. Management agents are controlled by the management station and include hosts, bridges, routers, and hubs. Thus, while *Stalling* may disclose the use of adapters when communicating between various IT systems, this reference does nothing to support the Examiner's finding that Applicants' claimed IT system corresponds to network device such as a router or optical device. In fact, *Stalling* supports Applicants' position in that at best a router or optical device as disclosed in *Tindal* cannot in and of itself reasonably be considered an IT system as alleged by the Examiner.

Shorter is applied to remedy the acknowledged deficiencies of *Tindal* and *Stallings* with respect to the reference storage holding references to the entities in the respective data sets of the various IT systems such that a specific entity in a specific IT system can be addressed through the adapter of the specific IT system, as recited in Applicants' claims.

Shorter discloses a peer-to-peer multi channel retailing system, in which common data such as customer identification data is shared between the different channels. The data can be created or modified at any channel, that is, the data is replicated across multiple retail IT systems. See Shorter, pgph [0013]. As a result, internal tables can indicate the location of other retail channels. Id., pgph [0027]. This disclosure notwithstanding, however, *Shorter* still does not disclose or suggest entities and a consistency service as recited in the claims. More importantly, because the combination of *Tindal* and *Stallings* discloses that a router or optical device is not an IT system as recited in Applicants' claims, and *Shorter* does nothing

to disparage this position, the addition of *Shorter* as a secondary reference does not remedy the deficiencies of the primary references.

The Examiner concedes that the combination of *Tindal*, *Stallings*, and *Shorter* fails to disclose or suggest that the different IT systems include any combination of a supervisory control and data acquisition system, a computerized maintenance management system, and a geographic information system. *Ghosh* is relied upon in an effort to remedy this deficiency.

Ghosh discloses a wind power management system that monitors the performance of wind turbine generators situated in wind farms. Each wind farm includes a SCADA subsystem to collect filtering and storing 10-minute process data into a portfolio managing system (RT-WPPM). The RT-WPPM and SCADA include an interface to a computerized maintenance management system CMMS which is used to manage work, inventory, and billing at each wind park.

As with *Shorter* above, however, *Ghosh* fails to disclose any embodiments in which a router or optical device can correspond to an IT system as recited in Applicants' claims. For at least this reason, *Ghosh* does not remedy the deficiencies of the primary references.

In summary, *Tindal*, *Stallings*, *Shorter*, and *Ghosh* when applied individually or in combination as alleged by the Examiner fail to disclose or suggest every feature and/or the combination of features recited in the claims. Namely, the prior art combination as alleged does not embody a system or method that includes at least the claimed combination of entities modeling a physical asset of a utility and stored in data sets of a multitude of different IT systems of the utility, and a consistency service. For this reason, withdrawal of this rejection is respectfully requested.

Because claims 2-7, 9, and 10 depend from one of independent claims 1 and 8, Applicants respectfully submit that these claims are allowable for at least the same reasons discussed above with regard to their respective base claim. In addition, these claims are further distinguishable over the applied references by virtue of the additional features recited therein. Thus, because *Menezes* fails to remedy the deficiencies of *Tindal*, *Stallings*, and *Shorter* with regard to entities modeling a physical asset of a utility and stored in data sets of a multitude of different IT systems of the utility as recited in the claims. Therefore, withdrawal of these rejections is respectfully requested.

CONCLUSION

Based on the foregoing amendments and remarks, Applicants respectfully submit that claims 1-10 are allowable and this application is in condition for allowance. In the event any unresolved issues remain, the Examiner is encouraged to contact Applicants' representative identified below.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

Date: February 14, 2011

By: /Shawn B. Cage/
Shawn B. Cage
Registration No. 51522

Customer No. 21839
703 836 6620